

## **REMARKS**

The Office action mailed 24 September 2003, has been received and its contents carefully noted. Claims 1-10, 14-18, and 24 were pending. By this amendment, claims 1, 2, 4, 5, 7, and 24 have been amended and claims 6, 8, 11-13, and 18-23 are canceled. Support may be found in the specification generally and the claims as originally filed. No statutory new matter has been added. Therefore, entry of the claims as amended is respectfully requested.

### **Claim Objection**

The Examiner objected to claim 24 for being directed to non-elected subject matter.

Applicants respectfully submit that claim as amended obviates the objection. Therefore, the objection should properly be withdrawn.

### **Rejection under 35 U.S.C. 112, second paragraph**

The Examiner rejected claims 1-10, 14-17, and 24 under 35 U.S.C. 112, second paragraph, as being indefinite for recitation of “having substantial identity”, “as compared to a control”, “functional integrity”, “variant”, “substantially identical”, and “that corresponds to the hydrophobic loop”.

Applicants respectfully submit that the claims as amended obviate the rejection. Therefore, the rejection under 35 U.S.C. 112, second paragraph, should properly be withdrawn.

### **Rejection under 35 U.S.C. 112, first paragraph**

The Examiner rejected claims 1-10, 14-17, and 24 under 35 U.S.C. 112, first paragraph, as being nonenabled for any variants or any polypeptides having substantial identity to SEQ ID NOs:1-4. Specifically, the Examiner deemed that the specification does not support the broad scope of the claims. The Examiner also rejected claims 1-3, 8-10, 14-17, and 24 under 35 U.S.C. 112, first paragraph, as lacking written description.

Applicants respectfully submit that the claim as amended obviates the rejections under 35 U.S.C. 112, first paragraph. Specifically, the claims as amended are limited to specific sequences and are therefore enabled and have written description support. Thus, the rejection under 35 U.S.C. 112, first paragraph, should properly be withdrawn.

**Rejection under 35 U.S.C. 102(b)**

The Examiner rejected claims 1-10 under 35 U.S.C. 102(b) as being anticipated by Gould et al., Bradley et al., Frankel et al., Kim et al., or Walsh et al. Specifically, the Examiner deemed that the cited prior art references disclose ricin variants with reduced or absent N-glycosidase activity.

Applicants respectfully submit that the claims as amended are limited to specific polypeptide sequences. These specific polypeptide sequences as claimed are not taught in the prior art. Therefore, Applicants respectfully submit that the prior art does not anticipate the present invention as claimed and the rejection under 35 U.S.C. 102(b) should properly be withdrawn.

**Rejection under 35 U.S.C. 103(a)**

The Examiner rejected claims 14-17 and 24 under 35 U.S.C. 103(a) as being unpatentable over Gould et al., Bradley et al., Frankel et al., Walsh et al., and Kim et al. as applied to claims 1-10 above and further in view of common knowledge in the art. Specifically, the Examiner deemed that it would have been obvious to those skilled in the art to use ricin toxin A chain variants with reduced or absent N-glycosidase activity and retained neutralizing immunological epitope to develop vaccine compositions.

Applicants respectfully submit that nowhere in the prior art are the specific polypeptide sequences as claimed disclosed or suggested. Even if the prior art suggested a desire for obtaining a ricin A chain that had reduced or absent N-glycosidase activity and retained a neutralizing immunological epitope, until the present invention, it was unknown how to modify wild type ricin A chain in order to actually have a ricin A chain that had reduced or absent N-glycosidase activity and a retained neutralizing immunological epitope in hand. In other words, the prior art does not teach or suggest the ricin A chain sequences as claimed. Nowhere in the prior art are any ricin A chain sequences taught or suggested with a reasonable likelihood of success in achieving polypeptides that have reduced or absent N-glycosidase activity and a retained neutralizing immunological epitope. Therefore, the invention as claimed is nonobvious and the rejection under 35 U.S.C. 103(a) should properly be withdrawn.



### **Request for an Interview**

Should there be any remaining issues after entry of the amendment and consideration of the remarks herein, Applicants respectfully request either an in-person interview or a telephonic interview with the Examiner.

### **Extension of Time**

A Petition for an Extension of Time for one (1) month under 37 C.F.R 1.136 and the appropriate fee are submitted herewith to extend the time for responding to the Official Action to 24 January 2004.

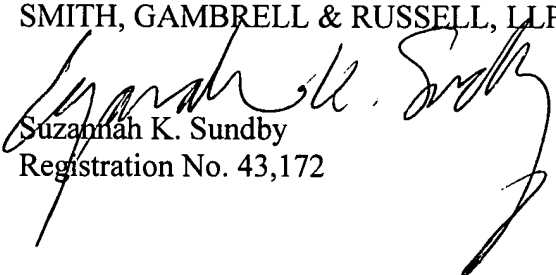


## CONCLUSION

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

It is not believed that extensions of time are required, beyond those that may otherwise be provided for in accompanying documents. If, however, extensions of time under 37 C.F.R. §1.136 other than those otherwise provided for herewith are required to prevent abandonment of the present patent application, then such extensions of time are hereby petitioned, and any fees therefor are hereby authorized to be charged to our Deposit Account No. 210-380, Attorney Docket No. 034047.016US (RIID 01-58).

Respectfully submitted,  
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Date: 23 January 2004

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